

Claims

1. A fuel injection valve for an internal combustion engine comprising a nozzle fixed to a leading end portion of a nozzle holder, with the nozzle being configured such that a nozzle needle inserted into a guide hole inside a nozzle body is guided by the guide hole and moves in an axial direction to open/close an injection hole,

wherein at least part of a gap formed between the nozzle needle and the guide hole has a tapered shape that widens toward the nozzle holder.

2. The fuel injection valve for an internal combustion engine of claim 1, wherein the entire gap has a tapered shape that widens toward the nozzle holder.

3. The fuel injection valve for an internal combustion engine of claim 1, wherein the tapered shape of the gap is a linear tapered shape.

4. The fuel injection valve for an internal combustion engine of claim 2, wherein the tapered shape of the gap is a linear tapered shape.

5. The fuel injection valve for an internal combustion engine

of claim 1, 2, 3, or 4, wherein the gap has a tapered shape as a result of a tapered portion being formed in at least the guide hole.

6. The fuel injection valve for an internal combustion engine of claim 1, 2, 3, or 4, wherein the gap has a tapered shape as a result of a tapered portion being formed in at least the nozzle needle.